Bioeconomia La Chimica Verde E La Rinascita Di Uneccellenza Italiana

This book argues that a variety of policies will be required to create synergies between the water-energy-food nexus sectors while reducing trade-offs in the development of a green economy. Despite rising demand for water, energy and food globally, the governance of water-energy-food sectors has generally remained separate with limited attention placed on the interactions that exist between them. Brears provides readers with a series of in-depth case studies of leading cities, states, nations and regions of differing climates, lifestyles and income-levels from around the world that have implemented a variety of policy innovations to reduce water-energy-food nexus pressures and achieve green growth. The Green Economy and the Water-Energy-Food Nexus will be of interest to town and regional planners, resource conservation managers, policymakers, international companies and organisations interested in reducing water-energy-food nexus pressures, environmental NGOs, researchers, graduate and undergraduate students.

The Handbook of Microalgae-based Processes and Products provides a complete overview of all aspects involved in the production and utilization of microalgae resources at commercial scale. Divided into four parts (fundamentals, microalgae-based processes, microalgae-based products, and engineering approaches applied to microalgal processes and products), the book explores the microbiology and metabolic aspects of microalgae, microalgal production systems, wastewater treatment based in microalgae, CO2 capture using microalgae, microalgae harvesting techniques, and extraction and purification of biomolecules from microalgae. It covers the largest number of microalgal

products of commercial relevance, including biogas, biodiesel, bioethanol, biohydrogen, single-cell protein, single-cell oil, biofertilizers, pigments, polyunsaturated fatty acids, bioactive proteins, peptides and amino acids, bioactive polysaccharides, sterols, bioplastics, UV-screening compounds, and volatile organic compounds. Moreover, it presents and discusses the available engineering tools applied to microalgae biotechnology, such as process integration, process intensification, and techno-economic analysis applied to microalgal processes and products, microalgal biorefineries, life cycle assessment, and exergy analysis of microalgae-based processes and products. The coverage of a broad range of potential microalgae processes and products in a single volume makes this handbook an indispensable reference for engineering researchers in academia and industry in the fields of bioenergy, sustainable development, and high-value compounds from biomass, as well as graduate students exploring those areas. Engineering professionals in bio-based industries will also find valuable information here when planning or implementing the use of microalgal technologies. Covers theoretical background information and results of recent research. Discusses all commercially relevant microalgae-based processes and products. Explores the main emerging engineering tools applied to microalgae processes, including techno-economic analysis, process integration, process intensification, life cycle assessment, and exergy analyses.

This is an introduction to the principles of modern ecology as they relate to today's threat to Earth's life-support systems. Themes examined include experimental life-support systems, hierarchies, ecosystems and landscapes, component physical factors, population, development and evolution.

This book provides an interdisciplinary and comprehensible introduction to bioeconomy. It thus provides basic knowledge

for understanding a transformation process that will shape the 21st century and requires the integration of many disciplines and industries that have had little to do with each other up to now. We are talking about the gradual and necessary transition from the age of fossil fuels, which began around 200 years ago, to a global economy based on renewable raw materials (and renewable energies). The success of this transition is key to coping with the challenge of climate change. This book conceives the realization of bioeconomy as a threefold task – a scientific, an economic and an ecological one. · Where does the biomass come from that we need primarily for feeding the growing world population but also for future energy and material use? How can it be processed in biorefineries and what role does biotechnology play in this regard? · Which aspects of innovation economics need to be considered, which economic aspects of value creation, competitiveness and customer acceptance are important? · What conditions must a bioeconomy fulfil in order to enable a sustainable development of life on earth? May it be regarded as a key to further economic growth or shouldn't it rather orient itself towards the ideal of sufficiency? By dealing with these questions from the not necessarily consistent perspectives of proven experts, this book provides an interdisciplinary overview of a dynamic field of research and practice that raises more questions than answers and thus may nurture the motivation of many more people to seriously engage for the realization of a bioeconomy.

Food and nutrition security - identified via availability, access, utilization, and stability - and transitions to sustainable food systems are major discourses in the agro-food arena, as many countries today experience different forms of malnutrition simultaneously, such as child undernutrition, anemia among women, and adult obesity. Meanwhile, the triple burden of malnutrition (undernutrition, overnutrition, and

micronutrient deficiency) is still widespread. Food Security and Nutrition explores integrated, context-specific approaches to food security challenges, emphasizing nutrition security as an integral component and addressing the implications of food content to food and nutrition security policies. Providing insight into these challenges through agricultural, policy, nutritional, geographic and sustainability lenses, Food Security and Nutrition is a valuable reference for food scientists and nutrition researchers working in food supply, food security, and nutrition security, and policy makers, investors, and other decision-makers seeking to address food insecurity around the world. Addresses nutrition security as part of the overall challenge of food security Explores contributing factors that impact both food and nutrition security Presents insights into effective policy development and implementation

The current era of incredible innovations has made science and technology one of the most powerful tools to meet the goals of incremental prosperity for humans and sustainable development. The development of the biotech industry in any given country is shaped by the characteristics of the technology-particularly its close relation to scientific knowledge-and by country-specific factors-the level and nature of the scientific knowledge base, the institutional set-up, and the role assumed by the government-which influence the country's ability to exploit new opportunities and appropriate the respective results. This book presents an integrated approach for sustained innovation in various areas of biotechnology. Focusing mainly on the industrial, socio-economic and legal implications of biotechnological advances, it examines in detail not only the implications of IPR in omics-based research but also the ethical and intellectual standards and how these can be developed for sustained innovation. Integrating science and business, it

offers a peek behind the scenes of the biotech industry and provides a comprehensive analysis of the foundations of the present day industry for students and professionals alike. The book is divided into three parts: Food and Agricultural Biotechnology Industrial Biotechnology Pharmaceutical Biotechnology.

Find out where our world is headed with this dazzling first-hand account of inventing the future from the #1 New York Times bestselling author of What Should I Do With My Life? and the founder of science accelerator IndieBio. Decoding the World is a buddy adventure about the quest to live meaningfully in a world with such uncertainty. It starts with Po Bronson coming to IndieBio. Arvind Gupta created IndieBio as a laboratory for early biotech startups trying to solve major world problems. Glaciers melting. Dying bees. Infertility. Cancer. Ocean plastic. Pandemics. Arvind is the fearless one, a radical experimentalist. Po is the studious detective, patiently synthesizing clues others have missed. Their styles mix and create a quadratic speedup of creativity. Yin and Yang crystallized. As they travel around the world, finding scientists to join their cause, the authors bring their firsthand experience to the great mysteries that haunt our future. Natural resource depletion. Job-taking robots. China's global influence. Arvind feels he needs to leave IndieBio to help startups do more than just get started. But as his departure draws near, he struggles to leave the sanctum he created. While Po has to prove he can keep the "indie" in IndieBio after Arvind is gone. After looking through their lens, you'll never see the world the same.

We are in the midst of an unprecedented era of rapid scientific and technological advances that are transforming the way our foods are produced and consumed. Food architecture is being used to construct healthier, tastier, and more sustainable foods. Functional foods are being created

to combat chronic diseases such as obesity, cancer, diabetes, stroke, and heart disease. These foods are fortified with nutraceuticals or probiotics to improve our mood, performance, and health. The behavior of foods inside our guts is being controlled to increase their healthiness. Precision nutrition is being used to tailor diets to our unique genetic profiles, microbiomes, and metabolisms. Gene editing, nanotechnology, and artificial intelligence are being used to address modern food challenges such as feeding the growing global population, reducing greenhouse gas emissions, reducing waste, and improving sustainability. However, the application of these technologies is facing a backlash from consumers concerned about the potential risks posed to human and environmental health. Some of the questions addressed in this book are: What is food architecture? How does sound and color impact taste? Will we all have 3D food printers in all our homes? Should nanotechnology and gene editing be used to enhance our foods? Are these new technologies safe? Would you eat bug-foods if it led to a more sustainable food supply? Should vegetarians eat themselves? Can nutraceuticals and probiotics stop cancer? What is the molecular basis of a tasty sustainable burger? David Julian McClements is a Distinguished Professor in food science who has used physics, chemistry, and biology to improve the quality, safety, and healthiness of foods for over 30 years. He has published over 900 scientific articles and 10 books in this area and is currently the most highly cited food scientist in the world. He has won numerous scientific awards for his work. The aim of this book is to highlight the many exciting advances being made in the science of foods, and to show their application for solving important problems related to the modern food supply, such as tackling chronic diseases, feeding a global population, reducing food waste, and creating healthier and

tastier foods.

This book provides a broad range of applications and recent advances in the search for biofilm materials in nature. It also explains the future implications for biofilms in the areas of advanced molecular genetics, pharmaceuticals, pharmacology, and toxicology. This book is comprised of 20 chapters from leading experts in the field and it examines immunology and microbiological studies derived from biofilms as well as explores environmental, agricultural, and chemical impacts on biofilms. It is divided into five subdivisions: biofilms and its complications, biofilm infections in human body, detection of biofilm-forming pathogens, antibiofilm chemotherapy, and biofilms production tools in aquaculture. This book may be used as a text or reference for everyone interested in microbial biofilms and their current applications. It is also highly recommended for environmental microbiologists, medical microbiologists, bioremediation experts, and microbiologists working in biocorrosion, biofouling, biodegradation, water microbiology, quorum sensing, and many other related areas. Scientists in academia, research laboratories, and industry will also find it of interest. This book includes chapter homework problems and case studies. Powerpoints are also available for adopting instructors. Discusses and clarifies the resource of isolation and chemical properties from biofilms Discusses the latest pharmaceutical, pharmacological, and medicinal approaches toward the treatment of chronic and uncured diseases, such as Alzheimer's osteoporotic, sexual dysfunction, sleep sickness, allergy

treatment, asthma, hair loss, AIDS, hypertension, antiaging, etc. Examines immunology and microbiological studies derived from biofilms Explores environmental, agricultural, and chemical impacts on biofilms. Dr. Bakrudeen Ali Ahmed Abdul is an Associate Professor, the Head of the Department of Biochemistry and Dean of the School of Life Sciences, Centre for Research and Development (CRD), PRIST Deemed University, Vallam, Thanjavur, Tamil Nadu, India. His research areas include the application of plant biochemistry, bioactive compound production, biotechnological methods, development of pharmaceutical products and pharmacological studies. Vandana Shiva è diventata una delle più importanti testimonial delle lotte per la difesa dell'ecosistema, contro il saccheggio delle risorse naturali che le grandi corporation da tempo perseguono, senza alcun rispetto per le popolazioni né per i luoghi. È una logica drammatica che sta facendo precipitare il nostro pianeta verso una situazione di non ritorno, contro cui si oppone il sapere antico, connesso con la natura e il suo ciclo, delle popolazioni indigene. L'aggressiva politica delle corporation negli ultimi anni ha fatto un salto di qualità. Le multinazionali sempre più ricorrono all'uso strutturato della forza, trasformando in senso regressivo i paesi in veri e propri stati militarizzati corporativi – come testimoniano quanto sta accadendo nelle zone tribali indiane e l'arresto di numerosi ambientalisti e difensori dei diritti umani.Contro questo, in tutto il mondo si sta formando un'altra consapevolezza che pone al centro i diritti di Madre Terra.In pieno caos, con coraggio e tanto

amore, la gente comune, dal basso, sta costruendo una nuova visione del pianeta. Questo libro fa il punto proprio sullo scontro in atto tra le due opposte concezioni del mondo.

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This book defines the new field of "Bioeconomy" as the sustainable and innovative use of biomass and biological knowledge to provide food, feed, industrial products, bioenergy and ecological services. The chapters highlight the importance of bioeconomy-related concepts in public, scientific, and political discourse. Using an interdisciplinary approach, the authors outline the dimensions of the bioeconomy as a means of achieving sustainability. The authors are ideally situated to elaborate on the diverse aspects of the bioeconomy. They have acquired in-depth experience of interdisciplinary research through the university's focus on "Bioeconomy", its contribution to the Bioeconomy Research Program of the federal state of Baden-Württemberg, and its participation in the German Bioeconomy Council. With the number of bioeconomy-related projects at European universities rising, this book will provide graduate students and researchers with background information on the bioeconomy. It will familiarize scientific readers with bioeconomy-related terms and give scientific background for economists, agronomists and natural scientists alike.

This book examines the bioeconomy concept, analysing the opportunities it can generate, the constraints and the potential benefits for society. The main objective of bioeconomy is to promote economic development, by

creating jobs and enhancing the sustainable utilization of bio-resources. A primary driver of bioeconomy strategy, therefore, is the need to respond to the growing population's food and economic requirements. While today research and literature related to bioeconomy are limited, this book presents a unique collection of perspectives on the complex dimensions of the bioeconomy debate. Drawing on the experiences from Europe, Asia and Africa, it presents an international overview. The chapters address a wide range of issues, including coastal-land interactions, ecosystem services, food production, rural development, agriculture, forest management and bioenergy. As a whole, the volume outlines what role bioeconomy can play in contributing to the United Nations Sustainable Development Goals (SDGs) without compromising on the ecological sustainability and equitable distribution of benefits. The book concludes by providing recommendations for developing bioeconomy in respective sectors (agriculture, forestry, fisheries, renewable energy) and directions for planning future bioeconomy programmes and strategies. The Bioeconomy Approach will be of great interest to students and scholars of ecological economics, development economics and environmental economics, as well as policy-makers and practitioners involved in sustainable development.

Bioplastics: A case study of Bioeconomy in Italy provides a no-nonsense case in support of public policies that modify consumption patterns, contribute solving environmental issues while stimulating product and process innovation all along a product’s life-cycle.

Analysis of legislation introduced in Italy in 2011 to effectively impose both re-usable, i.e. durable bags, and single-use biodegradable compostable carrier bags details a success story: - consumers have changed their behaviour by cutting down single-use carrier bags by 50%; - biodegradable, compostable carrier bags have substituted the remaining single-use carrier bags, thus triggering further positive effects by becoming: - bio-waste collection containers that favour recycling - communication vehicles by being and carrying appropriate messages. Furthermore this has supported the market uptake of innovative, sustainable niche products thus fostering innovation and development of the bioeconomy.

«Il libro ha il grande pregio di affrontare la transizione da un modello di economia lineare a uno circolare, che sarà l'imperativo per imprese e istituzioni nei prossimi anni. Solo grazie allo sviluppo di modelli di business circolari potremo garantire una crescita economica sostenibile e duratura del nostro sistema economico, salvaguardando al contempo il pianeta dallo sfruttamento eccessivo degli ecosistemi e il depauperamento delle risorse». Lorenzo Solimene, KPMG Advisory S.p.A., Associate Partner Sustainability Services «L'economia circolare è cruciale se vogliamo capire come si evolverà il futuro e come potremo modellarlo: si tratta di ricollegare business e società. Come? Coltivando il capitale economico, naturale e sociale all'interno di un modello di economia reale che è rigenerativo by design, grazie all'innovazione e a un cambiamento sistematico del mindset». Massimiano Tellini, Intesa Sanpaolo S.p.A.,

Global Head Circular Economy «L'economia circolare nel nostro Paese è già realtà in diversi territori grazie al lavoro di istituzioni, società pubbliche e private, università e centri di ricerca che fanno in Italia quello che neanche i Paesi del nord Europa sono in grado di realizzare. Ma per far decollare il settore occorre rimuovere gli ostacoli che lo rallentano: tra questi la burocrazia asfissiante, l'inadeguatezza di chi decide le politiche, le insufficienti risorse destinate alla ricerca, il mancato consenso sociale alla realizzazione dei necessari impianti. Passa anche dalla risoluzione di questi problemi la definitiva consacrazione dell'economia circolare made in Italy». Stefano Ciafani, Presidente nazionale, Legambiente Onlus

The definitive biography of the brilliant, charismatic, and very human physicist and innovator Enrico Fermi In 1942, a team at the University of Chicago achieved what no one had before: a nuclear chain reaction. At the forefront of this breakthrough stood Enrico Fermi. Straddling the ages of classical physics and quantum mechanics, equally at ease with theory and experiment, Fermi truly was the last man who knew everything--at least about physics. But he was also a complex figure who was a part of both the Italian Fascist Party and the Manhattan Project, and a less-than-ideal father and husband who nevertheless remained one of history's greatest mentors. Based on new archival material and exclusive interviews, The Last Man Who Knew Everything lays bare the enigmatic life of a colossus of twentieth century physics.

Bioeconomia. La chimica verde e la rinascita di

un'eccellenza italianaEconomia circolare e management. Un nuovo approccio industriale per la gestione d'impresagoWare & Guerini Next

Il testo raccoglie contributi di giuristi, scienziati, analisti finanziari e bioeconomisti, filosofi, vertici religiosi, politologi, rappresentanti del mondo dello spettacolo, architetti, che hanno fornito una testimonianza dei problemi e delle prospettive affrontate con, e aperte dal COVID-19. La pandemia si è sviluppata in Italia, in Europa e nel cosiddetto "Primo mondo", in un contesto per lo più organizzato a livello digitale e, teoricamente, medicalmente supportato. Nonostante ciò ha pressoché paralizzato interi circuiti economici, ha evidenziato carenze sia di livello sanitario che infrastrutturale, ha ricordato, soprattutto, i limiti delle scoperte biotecnologiche, ha portato in emersione fragilità personali e di sistema, accentuandole. L'approccio adottato, pur nella presenza di contributi da parte di esperti di settore, è stato di voluta, immediata comprensione al fine di poter consentire la percezione diretta di quelli che sono stati i principali profili di criticità che si sono dovuti affrontare e con i quali ci si è dovuto confrontare. Il testo offre un'istantanea sulle criticità scientifiche, giuridiche e giudiziarie, economiche, religiose, sociali e ricorda che questi eventi mantengono, anche in questo millennio, margini tanto di prevedibilità quanto di criticità importanti.

Bioplastiche: un caso studio di bioeconomia in Italia dimostra come una politica pubblica possa stimolare l'innovazione di processo e di prodotto lungo tutto il ciclo di vita e testimonia la possibilità di modificare le abitudini di consumo e favorire l'ambiente. È un caso di successo tutto italiano. L'analisi della legislazione che fin dal 2011 ha introdotto in Italia l'uso di sacchetti riutilizzabili insieme a quello di sacchetti mono-uso biodegradabili e compostabili prova questo successo.

Infatti è provato che: - i consumatori hanno modificato il proprio comportamento riducendo del 50% l'uso dei sacchetti; - i sacchetti biodegradabili hanno sostituito i rimanenti sacchetti mono-uso, con ulteriori effetti positivi a cascata che includono: - la possibilità di raccogliere materia compostabile favorendo il riciclo; - l'essere il sacchetto uno strumento di comunicazione positiva sia in quanto fatto di materia biodegradabile sia come veicolo di messaggi di promozione ambientale stampati sul sacchetto stesso. Infine, questa misura ha favorito l'affermarsi sul mercato di prodotti innovativi di nicchia contribuendo così a un'ulteriore innovazione e sviluppo della bioeconomia. Il volume, pubblicato in lingua inglese e italiana, è a cura di Walter Ganapini del Comitato scientifico dell'Agenzia europea dell'ambiente, e contiene i contributi di Corrado Clini, ministro dell'Ambiente del governo Monti, e di Catia Bastioli, presidente del Kyoto Club.

A definition and discussion of the pros and cons of globalization.

Environmental law and governance are the cornerstones of global efforts to conserve the environment, protect resources and ensure fair and equitable outcomes for all of the planet's inhabitants. This book presents a series of thought-provoking chapters which consider the place of governance and law in the defence against imminent and ongoing threats to ecological, social and cultural integrity. Written by an international team of both established and early-career scholars from various disciplines and backgrounds, the chapters cover the most pressing and contemporary issues in environmental law and governance. These include access and benefit-sharing; the right to food and water; climate change coping and adaptation; human rights; the rights of indigenous communities; public and environmental health; and many more. The book has a general focus on

environmental governance and law in the European Union and offers points of comparison with Canada and North and South America.

This book is a critique and provincialization of Western social science and Global Northern academia, by the author of The Digital Coloniality of Power. It exposes shared colonial and extractive rationalities and histories of research, higher education, digitalization, and bioeconomy while proposing in the idea of BluesCollarship, a sketch for an alternative culture of worlding and commoning knowledge work and for making care matter in research and higher education. In a discourse analysis and provincialization of research and higher education, a tradition of elitist White-Collaredness in academia and in the social sciences, in particular, is criticized, and an alternative attitude towards the production, transfer, and use of knowledge - BluesCollarship - is proposed. The latter is rooted in a different idea of what "infrastructure" is, and in practices of decoloniality. Noting the current political climate of propaganda and populism, the persistence of social inequalities as well as of racism and misogyny, it is proposed that how people give warrant for knowledge claims should be reviewed under different terms. A coherent theme is that there is a genealogical root for current neo-extractive and neo-colonial rationalities in the Athenian idea of oikos, which conflates family, household, and property. In taking a distinctly writerly approach - rather than giving ready-made answers - the book aims at permanently provoking readers at every turn to think further, as well as before-and-beyond what is written, but to do so in thinking together with Others. Thus the book addresses scholars and students from across the social sciences who seek challenges to established ways of thinking in academia without simply replacing one canon for another. This book is for those who think of themselves as knowledge and culture

laborers in this age of precarization, who seek to replace the university and cognitive capitalism with a pluriversity and an infrastructure built on knowledge and culture as fundamental values.

Chiarimenti, approfondimenti, esempi pratici: ecco la guida per "padroneggiare" le Novità Fiscali del 2021 in un anno segnato dalla pandemia. Gli esperti del Sole 24 ORE spiegano tutto nel dettaglio: dalle detrazioni Irpef alla proroga del 110%, dai contributi a fondo perduto al tax credit per le locazioni, dalla rivalutazione dei beni ai bonus Covid e alle agevolazioni per i professionisti.

Food Waste to Valuable Resources: Applications and Management compiles current information pertaining to food waste, placing particular emphasis on the themes of food waste management, biorefineries, valuable specialty products and technoeconomic analysis. Following its introduction, this book explores new valuable resource technologies, the bioeconomy, the technoeconomical evaluation of food-waste-based biorefineries, and the policies and regulations related to a food-waste-based economy. It is an ideal reference for researchers and industry professionals working in the areas of food waste valorization, food science and technology, food producers, policymakers and NGOs, environmental technologists, environmental engineers, and students studying environmental engineering, food science, and more. Presents recent advances, trends and challenges related to food waste valorization Contains invaluable knowledge on of food waste management, biorefineries, valuable specialty products and technoeconomic analysis Highlights modern advances and applications of food waste bioresources in various products' recovery

The Pulitzer Prize–winning journalist looks at the life and times of the Chicago Bulls superstar— "The best Jordan book so far" (The Washington Post). One of sport's biggest

superstars, Michael Jordan is more than an internationally renowned athlete. As illuminated through David Halberstam's trademark balance of impeccable research and fascinating storytelling, Jordan symbolizes the apex of the National Basketball Association's coming of age. Long before multimillion-dollar signings and lucrative endorsements, NBA players worked in relative obscurity, with most games woefully unattended and rarely broadcast on television. Then came Larry Bird and Magic Johnson, Jordan's two great predecessors, and the game's status changed. The new era capitalized on Jordan's talent, will power, and unrivaled competiveness. In Playing for Keeps, Halberstam is at his investigative best, delving into Jordan's expansive world of teammates and coaches. The result is a gripping story of the athlete and media powerhouse who changed a game forever. This ebook features an extended biography of David Halberstam.

Urban Fuel Poverty describes key approaches to defining and alleviating fuel poverty in cities using a multidisciplinary perspective and multiple case studies. It provides empirical knowledge on the levels and intensities of energy poverty in urban areas, along with new theoretical perspectives in conceptualizing the multidimensionality of energy poverty, with special focus given to the urban environment. Chapters discuss what energy poverty is in terms of taxonomy, stakeholders and affected parties, addressing the role of the economy and energy bills, the role of climate and city factors, the role of buildings, and the health and psychological impact on fuel poverty. The book addresses how to

measure energy poverty, how to map it, and how to draw conclusions based on illness and social indicators. Finally, it explores measures to ‘fight’ fuel poverty, including policy and governance actions, building efficiency improvements and city planning. Bridges interdisciplinary divides between policy and economy, cities and buildings, and health and society Addresses the physical performance of urban fuel poverty and their effect on thermal comfort and human health Provides strategies and policies to mitigate energy and fuel poverty

How does Britain get its food? Why is our current system at breaking point? How can we fix it before it is too late? British food has changed remarkably in the last half century. As we have become wealthier and more discerning, our food has Europeanized (pizza is children's favourite food) and internationalized (we eat the world's cuisines), yet our food culture remains fragmented, a mix of mass 'ultra-processed' substances alongside food as varied and good as anywhere else on the planet. This book takes stock of the UK food system: where it comes from, what we eat, its impact, fragilities and strengths. It is a book on the politics of food. It argues that the Brexit vote will force us to review our food system. Such an opportunity is sorely needed. After a brief frenzy of concern following the financial shock of 2008, the UK government has slumped once more into a vague hope that the food system

will keep going on as before. Food, they said, just required a burst of agri-technology and more exports to pay for our massive imports. Feeding Britain argues that this and other approaches are short-sighted, against the public interest, and possibly even strategic folly. Setting a new course for UK food is no easy task but it is a process, this book urges, that needs to begin now. 'Tim Lang has performed a public service' Simon Jenkins, Sunday Times

The bioeconomy concept aims to add sustainability to the production, transformation, and trade of biological goods. Though implemented around the world, the development of national bioeconomies is uneven, especially in the global South, where major challenges exist in Sub-Saharan Africa. In this context, the international BiomassWeb project aimed to underpin the bioeconomy concept by applying the value web approach, which seeks to uncover complex interlinked value webs instead of linear value chains. The project also aimed to develop intervention options to strengthen and optimize the synergies and trade-offs among different value chains. The Special Issue “Advances in Food and Non-Food Biomass Production, Processing and Use in Sub-Saharan Africa: Toward a Basis for a Regional Bioeconomy" compiles 23 articles produced in this framework. The articles are grouped in four sections: the value web approach; the

production side; processing, transformation and trade; and global views.

Con l'avvento delle fonti rinnovabili e delle comunità energetiche, che stanno sovvertendo un intero sistema economico, ha senso continuare a parlare di un'energia proprietaria, divisiva ed escludente, costosa? Questo modello superato è tra i principali fattori di vulnerabilità delle famiglie, che a fronte di salari invariati vedono crescere il prezzo dell'energia e la loro povertà energetica. L'abbondanza di quella dispensata gratuitamente da sole, vento e acqua rende inapplicabile il concetto stesso di proprietà privata, promuovendo invece l'idea di bene comune: che protegge le generazioni che verranno e permette la ridistribuzione della ricchezza anziché la sua concentrazione in poche mani. Il ruolo preminente dell'energia in tutti i settori della vita e nelle sfide del domani, nel progresso tecnologico, nella salvaguardia del pianeta, del ruolo sociale dell'uomo, conferma questa prospettiva. Con la competenza dell'esperto e la lingua del divulgatore, Livio de Santoli racconta le interazioni tra energia, economia, società e cultura, prendendo suggestioni dalla fantascienza come dallo sport, e soprattutto – quasi un "libro nel libro" – della musica progressive degli anni Settanta.

Mangiare: per la maggior parte di noi, si tratta di una cosa da fare alla svelta, pagando poco e senza farsi troppe domande. In realtà, l'agricoltura, cioè il

settore che produce il cibo di cui ci nutriamo, è al crocevia di una serie di questioni che ci toccano molto da vicino. Oggi il settore agricolo è responsabile di una quota importante delle emissioni di gas serra che riscaldano il clima ed è una delle principali cause della perdita di biodiversità. Complici anche noi consumatori italiani che, con un paradosso inaccettabile in un mondo in cui un miliardo di persone non ha da mangiare, buttiamo a mare la dieta mediterranea e contribuiamo a generare quantità scandalose di sprechi alimentari. Insomma: al di là dei proclami di chi sostiene che la soluzione deve essere basata sulla tecnologia (e in particolare attraverso l'impiego massiccio degli Ogm), la strada è un'altra, e passa per un'alleanza tra cittadini consapevoli e una nuova agricoltura. Un'agricoltura già all'opera, praticata da molti produttori italiani ed europei, attenti ai processi naturali e capaci di innovare. La terra che vogliamo individua i problemi che condizionano il sistema agricolo e propone delle soluzioni credibili, delineando una risposta efficace a quella che è una delle domande fondamentali della nostra epoca: "Nel volgere di pochi anni saremo in nove miliardi. Riusciremo a sfamare tutti?". - See more at: http://www.edizioniambiente.it/ebook/929/la-terra-che-vogliamo/

Un dato è incontrovertibile: le risorse della terra sono limitate. Se le pratiche attuali continueranno, il forte

incremento demografico, abbinato al boom della domanda di beni e servizi, le sfrutterà fino al punto di rottura. a peggiorare le cose, l'attuale modello di crescita lineare considera l'impatto dello spreco come una questione che «qualcun altro» dovrà risolvere – e nel frattempo la capacità del pianeta di assorbire e smaltire i rifiuti diminuisce ogni anno. È evidente che bisogna fare qualcosa. Non si tratta soltanto di reinserire nel ciclo produttivo gli sprechi intesi nel senso tradizionale di rifiuti, ma anche di porre rimedio all'enorme sottoutilizzazione di risorse naturali, prodotti e materiali. Si tratta di fare piazza pulita del concetto stesso di «scarti» e di riconoscere che ogni cosa ha un valore. In questa direzione, Circular economy propone strategie disruptive, in grado di dare un contributo sia al pianeta, sia ai profitti. Gli autori individuano cinque nuovi modelli di business che promuovono la crescita circolare, e identificano le tecnologie e le capacità richieste per trasformarli in vantaggio competitivo. Dal ridisegno delle filiere a una diversa gestione degli scarti, dall'estensione del ciclo di vita del prodotto alla sharing economy, dall'impiego di risorse sostenibili alla concezione del prodotto come servizio: ogni modello è illustrato dal racconto di numerosi casi ed esperienze concrete, caratteristica che fa di queste pagine una lettura fondamentale per imparare a superare le sfide epocali legate all'applicazione su larga scala dei nuovi modelli circolari.

Sustainability has come to the fore in the cosmetics andpersonal care industry. Rising ethical consumerism and the need forresource efficiency are making cosmetic companies – small,independent firms to global giants – take steps towardssustainable development. Sustainability: How the Cosmetics Industry is Greening Updiscusses the growing importance of sustainability in the cosmeticsindustry, highlighting the various ways organisations can addressthe economic, environmental and social aspects. How can thecosmetics industry make a difference in terms of ingredients,formulations, packaging, CSR, operations, and green marketing? Topics covered include: Environmental and social impacts of cosmetic products Ethical sourcing and biodiversity Renewable energy and waste management Green formulations and ingredients Green marketing issues and consumer behaviour Green standards, certification schemes and indices in thecosmetics industry Industry experts share their experiences on how they aretackling the challenges of sustainability: from raw materialprocurements, manufacturing, business processes, to distributionand marketing to consumers. The book concludes with somefuture growth projections; what are some of the shortcomings insustainability in the cosmetics industry and what can we expect tosee in the future? Sustainability: How the Cosmetics Industry is

Greening Updiscusses business and technical issues in all areas of sustainableproduct development, from sourcing ingredients, to formulation,manufacture and packaging. Covering a diverse range of subjects, this book appeals toprofessionals in many key sectors of the cosmetics and personalcare industry; cosmetic chemists, formulation scientists, R&Ddirectors, policy makers, business and marketing executives. It is also of relevance to academic researchers working in cosmeticchemistry and sustainable process development.

In questo libro istituzioni, esperti e aziende si incontrano per tessere la trama di una delle maggiori e universalmente riconosciute eccellenze italiane: l'alimentazione. Nella prima parte del volume, i contributi di esperti e opinion leader del settore aprono il dibattito, che prosegue nella seconda parte con le interviste a esponenti di spicco di un selezionato gruppo di imprese dell'agroalimentare italiano. Un mondo variegato proprio come lo è il cibo con tutti i suoi significati. Il testo è interamente tradotto in inglese, con testo a fronte.

From the former president of MIT, the story of the next technology revolution, and how it will change our lives. A century ago, discoveries in physics came together with engineering to produce an array of astonishing new technologies: radios, telephones, televisions, aircraft, radar, nuclear power,

computers, the Internet, and a host of still-evolving digital tools. These technologies so radically reshaped our world that we can no longer conceive of life without them. Today, the world's population is projected to rise to well over 9.5 billion by 2050, and we are currently faced with the consequences of producing the energy that fuels, heats, and cools us. With temperatures and sea levels rising, and large portions of the globe plagued with drought, famine, and drug-resistant diseases, we need new technologies to tackle these problems. But we are on the cusp of a new convergence, argues world-renowned neuroscientist Susan Hockfield, with discoveries in biology coming together with engineering to produce another array of almost inconceivable technologies—next-generation products that have the potential to be every bit as paradigm shifting as the twentieth century's digital wonders. The Age of Living Machines describes some of the most exciting new developments and the scientists and engineers who helped create them. Virus-built batteries. Protein-based water filters. Cancer-detecting nanoparticles. Mind-reading bionic limbs. Computer-engineered crops. Together they highlight the promise of the technology revolution of the twenty-first century to overcome some of the greatest humanitarian, medical, and environmental challenges of our time.

Nel contesto delle azioni immediate intraprese per

contrastare la crisi innescata dal COVID-19, la scienza e l'innovazione stanno svolgendo un ruolo essenziale nel fornire una migliore comprensione scientifica del virus, così come nello sviluppare vaccini, trattamenti e strumenti e tecniche di diagnosi. Sia il settore pubblico che quello privato hanno investito miliardi di dollari in questi sforzi, accompagnati da livelli senza precedenti di cooperazione internazionale.

Energia, telecomunicazioni, ambiente, sicurezza alimentare, salute, trasporti, ricerca, stabilità monetaria, mercato unico, facilitazioni nei commerci e molto altro. Ecco tutti i motivi per cui l'Unione europea è stata ed è un ausilio indispensabile alla vita quotidiana di tutti noi. Un po' in controtendenza rispetto alla vulgata dei nostri giorni che tende ad addebitare tutte le colpe all'Europa, questo libro vuole rimarcare come "Senza è peggio". Alla vigilia delle elezioni europee, nel mezzo di un rinnovato dibattito sull'opportunità o meno di restare nell'Unione e con la consapevolezza che solo un'Europa rinnovata possa reggere l'impatto con il futuro e con i forti venti sovranisti che si alzano, il libro intende spiegare i motivi per cui per i cittadini italiani l'Europa è, semplicemente, un guadagno oggi e un'opportunità domani. Senza l'Europa staremmo molto peggio di come stiamo adesso.

The goal of Molecules, Microbes, and Meals is to provide an overview of the science of food, exploring

all aspects of how food products we purchase and consume come to have the characteristics they do. The key focus is on the science underpinning the appearance, flavor, texture and qualities of food, and the transformations that occur when we cook food products. Every food product is a highly complex scientific entity, and a key objective of the book is to show that an understanding of the science of food can enhance our appreciation and wonder at it. Another key theme will be the convergence of science and art in food, and the history of food, whereby we have known how to undertake what are exceptionally scientifically complex activities such as fermentation, pasteurization and cooking long before the scientific basis for what was happening was understood.